E 61
.H52

Copy 2

With the kind regards of
H. W. H.

WHO ARE THE AMERICAN INDIANS?

BY

HENRY WETHERBEE HENSHAW.

[Reprint from The American Anthropologist. July, 1889.]

WASHINGTON:
JUDD & DETWEILER, PRINTERS.
1889.

E61
.H52
Copy 2.

By Transfer

JUL 3 1907

[From the American Anthropologist for July, 1889.]

WHO ARE THE AMERICAN INDIANS?*

BY HENRY WETHERBEE HENSHAW.

When Columbus discovered America he discovered not only a new continent but a new people—the American Indians. From one end to the other of its broad expanse the continent was occupied by Indian tribes that had held the land from time immemorial—so far at least as their own traditions aver—knowing nothing of any country but their own. The commonly presented picture of the Indians as they appeared at the time of the discovery is that of a horde of wandering savages, half or wholly naked, living on roots and herbs, or existing by the capture of wild animals scarcely more savage than themselves, and the chief objects of whose existence was to enslave, to torture, and to kill each other. Those who hold such opinions have ever taken a hopeless view of the Indian's present and a still more hopeless view of his future. Such a picture conveys a totally false impression of the Indian and of the state of culture to which he had attained at the era of the discovery. Though still living in savagery, he was in the upper confines of that estate and was fast pressing upon the second stage of progress, that of barbarism—that is to say, he had progressed far beyond and above the lowest states in which man is known to live, to say nothing of the still lower conditions from which he must have emerged, and had traveled many steps along the long and difficult road to civilization.

Already he had become skillful in the practice of many arts. Though the skins of beasts furnished a large part of his clothing, he

*A lecture delivered in the National Museum, Washington, D. C., March 30, 1889, in the "Saturday Course," under the auspices of the Anthropological, Biological, Chemical, National Geographic, and Philosophical Societies.

had possessed himself of the weaver's art, and from the hair of many animals, from the down of birds, and from the fibers of many plants he knew how to spin, to weave, and to dye fabrics.

Basket-making he had carried to so high a degree of perfection that little further improvement was possible.

The potter's art also was his, and though his methods were crude and laborious the results achieved, both as regards grace of form and ornamentation, may well excite admiration at the present day.

Copper had been discovered and was mined and roughly beaten into shape to serve for ornament and, to some slight extent, for mechanical use. In Mexico and Peru gold, silver, and copper were worked, and many authors contend that the method of making bronze, an invention fraught with tremendous possibilities, had there been discovered.

In much of South and Central America, Mexico, and the eastern parts of the United States so important an advance had been made in agriculture that it furnished a very large part of the food supply, and it should not be forgotten that the chief product of the Indian's tillage, maize or Indian corn, which to-day furnishes a large part of the world's food, was the gift of the Indian to civilization. A scarcely less important contribution to mankind is the potato, the cultivation of which also originated with the Indians. A third important agricultural product, though less beneficial, is tobacco, the use and cultivation of which had been discovered centuries before the advent of the European.

Architecture may seem like a large word to apply to the dwellings of the Indians. Nevertheless many of their houses were more substantial and comfortable than is generally supposed, while in the Northwest many tribes reared dwellings of hewn planks, sometimes as large as 210 feet long by 30 feet wide, which were capable of accommodating several hundred individuals. More pretentious and durable were the communal houses of mud and stone reared by the pueblo people of Arizona, New Mexico, and Mexico, while further south, in Central and South America, were edifices of hewn stone, which from their dimensions, the size of some of the blocks contained in them, and the extent and ornate character of the ornamentation, justly excite the wonder and admiration of the traveler and archæologist.

The advantages of a beast of burden had been perceived, and though the human back furnished by far the greater part of the

transportation, yet in North America the dog had been trained into an effective ally, and in the Andes the llama performed a similar office. Insignificant as was the use of the dog as a carrier, its employment cannot well be overestimated as a step in progress when it is remembered that the plain's tribes that most employed it lived in the midst of the buffalo, an animal which must have become of prime domestic importance in the never-to-be-enacted future of the Indian.

The need of some method of recording events and communicating ideas had been felt and had given rise, even among the ruder tribes, to picture-writing, which in Mexico and Central America had been so far developed into ideographs, popularly called hieroglyphics, as to hint strongly at the next stage, the invention of a true phonetic alphabet; nay more, the Mexicans and Mayas are believed to have reached a stage of true phonetic writing, where characters were made to represent not things, as true ideographic writing, but the names of things and even of abstract ideas; and this is a stage which may be said to be on the very threshold of one of the proudest achievements of civilization, that of a phonetic alphabet.

Instead of living in an unorganized state, where each man was a law unto himself in all things, the Indians lived under organized forms of government, rude enough indeed when compared with the highly organized system of civilized nations, but marking an essential advance on the conditions attained by savage peoples in other parts of the world. The chieftaincy was transmitted by well-understood laws or, as in some tribes, was more purely elective. Their social system was very ingenious and complex, and, being based largely upon kinship ties, was singularly well fitted for the state to which they had attained, of which indeed it was simply an expression and outgrowth. In many sections a considerable advance had been made in political confederation, and neighboring tribes combined for defense and to wage war against a common enemy. They had invented many and singularly efficient laws to repress and punish lawlessness against the individual and the social body, and as a consequence they enjoyed almost entire immunity from theft and many other crimes.

The development of religious ideas among our Indians is a curious and instructive study. Though the Great Spirit and the Happy Hunting Ground which missionaries and theologians thought they had discovered among them are now known to have had no existence, the Indians had by no means reached the state of culture in

which they were found without developing religions. Their gods or fetishes were innumerable, their priests endowed with immense influence, and their ceremonies of devotion and propitiation were as devout as they were elaborate. The precision of the beliefs of many tribes and the elaborateness of their rituals are simply astonishing. Thus their advance in the domain of religious thought equalled, if it did not surpass, their progress in some other directions.

If by medicine we mean the rational treatment of disease, the Indian can be said to have learned only the rudiments of the healing art. Medicine, in so far as it was a distinct profession, was almost wholly in the hands of the Medicine Man or Shaman, who filled the two-fold office of priest and doctor. Neither the theory nor the practice of the Shaman had in it anything that was rational and very little that was efficacious, except through the influence exercised over the mind of the patient, in other words, except so far as the Shaman was a faith-curer. Whatever that is marvelous in the modern cases of faith cure can be more than matched out of the practice and experience of the Shaman, who learned his trade long before the European came to these shores. He who would see the Indian Shaman need not seek the wilds of the Far West. He may find his counterpart on Pennsylvania avenue. The whole medical practice of the Indian Shaman was based upon the idea that all disease was the effect of evil disease spirits that had obtained lodgment in the body, or that it was caused by witchcraft, and so long as practice was directed to the dislodgment of these spirits no rational treatment was possible. I am aware that the above idea of Indian medicine is contrary to popular belief, which to some extent at least is in harmony with the claims of alleged Indian doctors of white extraction who claim to have derived their skill and their herbs directly from the hands of Indian experts. Recent and carefully conducted investigations on this subject, however, fully substantiate the above statements. Though roots and herbs were employed in the treatment of nearly all diseases, they were chiefly used as adjuncts to the charms and sorceries of the medicine man. Often they were not given to the patient at all, but were taken by the medicine man to heighten his power over the disease spirits. Often they were applied by being rubbed on the body of the patient or by being blown in the shape of smoke on the afflicted part.

Among the Indians was found flourishing to a remarkable degree the so-called doctrine of seals or signatures. A few examples of

the doctrine derived from the eastern Cheroki by Mr. James Mooney may prove of interest. Doubtless you are all familiar with the cone flower. The Cheroki call it deer eye, and from its fancied resemblance to the strong-sighted eye of the deer and its connection by name, for the Indian believes that there is a potent connection between the name of a thing and the thing itself, it is used as a wash for ailing eyes.

The common purslane (*Portulaca oleracea*) is used as a vermifuge, because the red stalk looks like a worm.

An infusion of the roots of the hoary pea (*Tephrosia virginiana*), called devil's shoe-strings in the South because of their toughness, is used by the Cheroki ball-players as a wash to strengthen their bodies, and by the women as a hair wash to strengthen it and keep it from falling.

Who of you has ever walked in our woods without getting on his clothing the common beggar's lice (*Desmodium*)? How tenaciously they stick you all know; so do the Cheroki, and because the burrs stick fast they use a tea made of them to strengthen the memory. The Cheroki at least can dispense with the service of a Loisette.

You whose ambition it is to be good singers have only to drink a tea of crickets, according to the Cheroki, for does not the cricket possess a fine voice and doth he not sing merrily?

The tendency of the human mind to speculate and to draw inferences, a tendency common alike to the savage and the civilized man, cannot be held in check forever, however strong the bonds; and just as knowledge and science escaped from priestly thrall within the history of civilized times, so a certain small amount of knowledge of the therapeutical use of drugs was gaining ground among the common folk of the Indians. It was fairly to be called old woman's practice, as it was largely in their hands. It grew out of observation; infusions of certain herbs produced certain results, acted as emetics or purgatives, and hence these herbs came to be employed with something like an intelligent purpose. Many of the herbs used were absolutely inert, many were harmful, of course, since where there is practically no true diagnosis and no correct knowledge of the effect of drugs there can be no really intelligent selection of remedies; but in the case of certain simple diseases herbs, the actual cautery, and above all the sweating process, were beginning to be recognized by the common folk as serviceable, and to be employed to some extent without recourse to the Shaman.

As the child must creep ere it can walk, in such theories and treatment, childish though they may seem, may be discerned the beginnings of the noble science of medicine which, having largely cast aside the superstitions that hampered its infant steps, now walks erect, and although of late she seems to have revived the beliefs of her childhood, her handmaiden, science, bids her call the demon disease spirits ignorance and vicious habits, the diseases themselves bacilli or germs. The Indian believed that the white man carried the spirit of small-pox in bottles and let it loose among them. Modern science actually does bottle the small-pox germs and germinate them at will. So the Indian theory of disease reappears in a new form.

Such in briefest outline are some of the achievements of the Indian as he was found by civilized man. Whatever value may be placed upon them, whatever rank may be assigned them in the scale of human efforts, they were at least his own, and some of them compare favorably with the record of our Aryan ancestors before they split up into the numerous nations which have done so much to civilize the world. Many, I am aware, hold that the Indian had progressed as far towards civilization as his capacities admitted; others have held, and possibly some now hold, that he was already on the decline; they see in his crude ideas and rude inventions only the degradation of a higher estate; in other words, instead of a savage preparing to enter civilization through the necessary half-way state of barbarism, he is held a half-civilized man lapsing into savagery. Such views, it is needless to say, find no favor in the mind of the evolutionist. To him, the achievements of the Indian are only the milestones which have marked the progress of every civilized nation in its march from what it was to what it is; to him the chief value and significance of his studies of the mental state of the Indian, as expressed in his mythology, his medicine, his social and political organization, or in his more concrete arts, is the fact that in them he reads the records of his own past. If there be any truth whatever in the theory of evolution as applied to human progress, only one inference can be drawn from the history of the Indian race as it appears in historical pages and in the no less eloquent records interpreted by archæologists. This inference is that, starting in its career later than some other races, or being less favored by circumstances or conditions of environment, or possibly being less endowed, the Indian, despite all, had progressed an immense distance

towards civilization ; that the race contained all the capabilities for a further advance and for achieving a civilization of its own, differing, it may be, markedly from our own, as other civilizations differ, but still containing within itself all the essentials of that wonderfully complex thing called civilization. Such at least is the lesson evolution teaches.

Hardly had the new land been discovered when the question arose, who are the Indians and where did they come from? Naturally enough the Indian had his own answers to these questions. As to who they are all tribes agree. "We are men," said the Illinois to the French, and the name of every tribe in America—the name by which they know themselves—signifies "true men," "men of men," "the only men," as evincing their superiority to all others. As to their origin, their ideas are as confused and perplexing as they are multifarious and conflicting. It may almost be said, as many tribes so many origins. A large number of tribes claim to have originated in the localities where they were first found by Europeans, where they emerged from the ground or came from the recesses of some neighboring mountain. The Chocta, for instance, claim to have come from an artificial mound in Mississippi. The mound has a depression at its center which is accounted for by the Creator stamping upon it to close the aperture when he saw that a sufficient number had emerged to form the Chocta tribe. One of the Shawni tribes was created from the ashes of the fire. The Yuchi, of Georgia, claim to be children of the sun, who is their mother, and the earth, their father, an exact reversal of the usual parentage. The Pomo, of California, claim that their ancestors, the Coyote men, were created directly from a knoll of red earth. The Klamath, of Oregon, were made from the service berry. The Yokut, of California, emerged from badger holes, as their name implies. Somewhat more poetical is the idea of the Aht, of Vancouver Island, who allege that animals were first created at Cape Flattery, and from the union of these with a star that fell from the skies resulted the first men, their ancestors.

The above are fair examples of the ideas entertained by the Indians respecting their own origin. Puerile they certainly are, yet who will maintain that they are more so than the theories of origin held by the Greeks and other classical peoples?

Who, then, are the American aborigines? For Columbus and his followers there was but one answer to the question. As he had

reached the eastern shores of India the people must be Indians, and his error is perpetuated to-day in the name. Later, when the newly discovered country was found to be not an old, but a new continent, the question of the origin and consanguinity of the Indians was renewed. So strongly tinged with religious thought was the philosophy of the day that biblical sources were naturally first appealed to to solve the knotty problem. As mankind was supposed to have originated in Asia and as all but the ten lost tribes were accounted for they were rationally appealed to for the origin of the Indian. Perhaps the best exponent of the belief in the Jewish origin of the Indians was Adair, who published his celebrated essay in 1775. Thoroughly familiar with Indian beliefs and customs, he succeeded in bringing together a mass of evidence, derived from a comparison of religious rites, civil and martial customs, marriages, funeral ceremonies, languages, and traditions, as curious and contradictory as it is inconclusive.

The Jewish origin of the Indians secured a very strong hold on the minds of the writers and thinkers of the eighteenth century, and so firmly did the theory take root that it has never been wholly given up, but is held to-day by a greater or less number as the only rational belief.

Though the favorite, the Jewish hypothesis is by no means the only one. Scientists and laymen count their theories by the scores. The Bible and ancient philosophy alike have been appealed to in support of pet hypotheses.

One believes America to have been colonized by Phœnician merchants; another, by Carthagenians. America was peopled by Carthagenians, says Venegas, and Anahuac is but another name for Anak. Besides, both nations practiced picture-writing; both venerated fire and water, wore skins of animals, pierced the ears, ate dogs, drank to excess, telegraphed by means of fires on hills, wore all their finery on going to war, poisoned their arrows, beat drums and shouted in battle. Not an unfair example this of the scientific deductions of the day. Surely he must be unreasonable who refuses to be convinced by such testimony!

Says the pious Cotton Mather, the natives of the country now possessed by the New Englanders had been forlorn and wretched heathen ever since they first herded here, and though we know not when or how these Indians first became inhabitants of this mighty continent, yet we may guess that probably the devil decoyed those

miserable savages hither, in hopes that the gospel would never come here to disturb his absolute empire over them.

The evidence that the Indians came from Scandinavia are as convincingly put as those proving that they came from Ireland, or Iceland, or Greenland. Equally conclusive are the arguments for a passage by the Indian across Bering Strait from Asia, across the Northern Pacific from Japan or China in junks, or across the Southern Pacific in canoes from the Polynesian Islands, or Australia. Even Africa is not too far distant to send its contingent to the new land, and when the ocean has been deemed to be too broad to permit a passage from foreign shores the willing imagination of the writer has dropped an island into mid-ocean, and called it Atlantis, to facilitate alike the crossing of the Indian and the reception of a fanciful theory. Thus there is a theory of origin to suit the tastes of all. If you have a special bias or predilection, you have only to choose for yourself. If there be any among you who decline to find the ancestors of our Indians among the Jews, Phœnicians, Scandinavians, Irish, Welsh, Carthagenians, Egyptians, or Tartars, then you still have a choice among the Hindu, Malay, Polynesians, Chinese, or Japanese, or, indeed, amongst almost any other of the children of men.

Preposterous as may seem many of the theories above alluded to, nearly all of them rest upon a certain basis of fact and comparison. Many, at least, of the similarities of thought, custom, methods, arts, religions, and myths from which the theories are deduced indeed exist, though false analogies permeate them all. The thread of fact which sustains the theories is, moreover, far too slender to bear the weight put upon it. It is not that the theories contain so much that is erroneous but the proof offered is entirely insufficient. The science of yesterday reared its edifices upon foundations of fact the very slightest. The science of to-day demands broader foundations and more deeply laid upon which to base its conclusions. Erroneous hypotheses like the above have, however, been productive of great good in pointing out and emphasizing some of the most useful lessons which the student of anthropology of the present day must learn and ever keep in mind. Of these perhaps the most important is that the human mind is everywhere practically the same; that in a similar state of culture man in groping his way along will ever seek the same or similar means to a desired end. That, granting the same conditions of environment, man acts upon them and is

acted upon by them in the same way the world over. Hence, in large part, arise those similarities of customs, beliefs, religions, and arts which have been appealed to as evidences of genetic connection or of common origin, when, in fact, they are evidences of nothing but of a common humanity.

This leads us to speak briefly of some of the leading methods of classification by which scientists have sought to solve the problem of the origin and relation of races and among other peoples of our own Indians.

The physical tests of race most approved by ethnologists are color, viz., the color of the skin, hair, and eyes; the structural differences of the hair; the size and shape of the skull as determined by capacity and measurements, and the test of language. Reserving the latter for more extended notice later, a few words may be devoted to the first named.

Few of the tests formerly relied upon in classifying mankind have proved less satisfactory to modern investigators than that of color. The microscope appears to show that color is not due to organic differences of race; not only are there great differences in the color of individuals of the same tribe, but of the same family, and even in the same individual at different periods of life. Thus, in the case of our Indians, it is well known that the skin of the infant at an early age is very light colored, scarcely distinguishable, in fact, from a Caucasian child, and that it assumes a deeper shade only with advancing years. This, I believe, is true irrespective of tribe or habitat. The hair of the Indian child is brown instead of black. The color of the adult Indian varies within very wide limits, but singularly enough he is never copper colored or red, as he has been called from the time of the discovery. All our Indians are brown, and while certain tribes, as the Tuscaroras and Mandans, are so light as to give rise to the theory that they are descendants of the Welsh, other tribes, as some of the Californians, are so dark as to closely approach the black Africans. I say black Africans, for it is to be remarked, in passing, that some African tribes are very light colored.

The division of mankind into four groups—white, black, copper, and olive—is, in a general way, consistent with facts. Moreover, these divisions are, to a certain extent, correlated with geographical range and climate, and thus correspond to the color differences of birds and animals. That they are also and perhaps more strictly

correlated with culture status is not to be doubted; for it may be said, in a general way, that all civilized peoples are light colored and nearly all barbaric and savage peoples are dark colored. So complete, however, is the intergradation of color when all varieties of mankind are considered, and so intangible are the distinctions which must be relied upon to distinguish them in the case of individuals and even of tribes that it appears that while color affords a convenient off-hand means of classification, and while it may be made useful in connection with other criteria, it is quite insufficient in itself as a test of race.

The more obvious peculiarities of the hair, according as it is straight, crisped, or curly, early attracted the attention of ethnologists. The modern microscope has shown that these peculiarities are more or less intimately correlated with structural differences, and that the straight hair of the American Indian and the Mongolian is nearly cylindrical in section, while the frizzled hair of the Negro and Papuan shows an oval or flattened section. Between the two extremes, however, are too many shades of difference to permit the extensive use of this criterion as a race classifier, except in a subordinate way.

Much time and thought has been expended by craniologists in the effort to classify races by means of the skull. Notwithstanding the great ingenuity exercised in devising methods and instruments to secure constant results and reliable figures as a basis for comparison, the results thus far obtained have been disappointing. So faulty were the mechanical means adopted by the earlier craniologists that students of to-day are compelled to discard their data and resulting conclusions and begin almost *de novo*. There are many able men who are sanguine not only that the physical structure of man may yet be made to reveal secrets bearing upon the origin of races, if there be more than one, but that the science of craniology in particular is destined to have an important bearing upon these racial problems. Whatever the future of craniology or the other methods of classification by physical characteristics may have in store, the contradictory results thus far obtained offer little to satisfy us. Not only do the naturalists and ethnologists who have studied man's physical characteristics differ as to the number of races of mankind and as to what constitutes a proper basis for classifying them, but thus far there has been little agreement as to the assignment of particular tribes or peoples. Perhaps more authorities are agreed that there is

but one race and one origin of mankind than agree upon any greater specific number; but when it is remembered that there are authorities who place the number of distinct races at two, three, four, five, six, seven, eight, eleven, sixteen, and that one places the total as high as sixty-three, it will be agreed, I think, that it is better to suspend judgment and not to accept any present result as final.

We have already noted that the earlier theories of origin for the Indian, based as they largely were upon certain assumed analogies of customs, laws, religious observances, myths, etc., rested upon such slight foundations as to hardly entitle them to be classed as scientific hypotheses. We have also seen that up to the present time the attempts to classify mankind by his physical characters have produced discordant results, and that little dependence is to be placed upon the results themselves or upon the theories arising therefrom which relate to the more profound question of the origin of races. In turning to the test of language, if doubt and uncertainty were left behind and harmony and agreement took the place of discordant views we might count ourselves fortunate indeed. But such is not the case. We have indeed only to go back a short time to find that the generalizations drawn from the study of language are as crude, the hypotheses as baseless, the theories as wild as are those we have just glanced at. Nor is this strange. Like its sister sciences, linguistics had to pass through a period in which speculation and hypothesis, instead of going hand-in-hand with facts and induction, usurped their place. Until the inductive method was born no science of philology was possible. The science of comparative philology is indeed of recent origin, nothing worthy of the name existing before the present century. Within the last fifty years it has made a wonderful growth and achieved results little short of marvelous. Though still in its infancy as regards future possibilities, and while it needs and welcomes the aid of all the other sciences to solve the complex questions which come properly within its domain, it is unquestion ably our best guide in problems relating to the origin and relationship of the races of mankind.

There are two broad and contradictory theories of the nature and origin of language. The first, which may be called the divine theory, is based upon biblical authority, and sees in language a divine gift from the Creator to the first pair. From the language thus miraculously created and put into the mouth of man have sprung all the varieties of speech with which men have clothed their thoughts from

the creation until now. The second or evolution theory sees evidences of growth and development in every language spoken by man. Comparing the languages of highly civilized peoples with those of lower culture, it finds in the latter evidences of the successive stages through which all languages have necessarily passed in their upward growth.

It maintains that language is an acquired possession; that it has originated through powers inherent in man himself; that by means of it he measures the distance between himself and the brutes; in short, by it more than by the possession of any other one thing he is man.

It notes the fact that among lower peoples languages are less and less highly organized; and that among them signs are much more freely used than among the higher; that the sign language is capable of a development among savage peoples and mutes so wonderful as to be the medium of all classes of ideas; and noting these it is prepared to believe, though it has not yet proved, that there was a time in the dawn of the human race when organized vocal speech was unknown, and when the fingers, the facial expression and the postures of the body, were the chief if not the sole means possessed by man to communicate to his fellows his simple wants and ideas. At first it may seem a startling, nay an almost incredible, idea that the time was when men could not talk, I do not say communicate, for it is hardly necessary to remind you that even the lower animals have means of communication. So much is spoken language a part of ourselves, so dependent are we on it, that it appears to be as much a natural possession as eyesight or the power to breathe. It is difficult indeed to conceive of ourselves as human beings without it. Yet each one of us came into the world without the ability to talk, though doubtless we soon made it known to others that we possessed voices, and some of us expended much time and effort ere we acquired the rudiments of speech, to say nothing of the years spent in acquiring facility in its use. The history of the child in this respect is but an epitome of the history of the human race. Ages of the child-life of the race were consumed when the organs of speech existed in a rudimentary condition; ages more passed ere it learned to train the slowly developing and stubborn vocal organs to do its bidding and to utter articulate sounds; and ages more were required ere it had organized the first harsh and uncouth vocables into the harmonious and expressive thing we call language.

Before proceeding further let us glance briefly at some of the methods employed by linguistic students in their efforts to unlock the mysteries of linguistic relationship. It has been well said that he who knows but one language knows no language. The truth of this paradox is chiefly rooted in the fact that every existing language has varied and developed from earlier and ruder forms; that furthermore no language has had an independent existence, but each one is connected in its origin and by affiliation with sister tongues that earlier or later in the history of the races speaking them have separated from the mother language and thenceforth have pursued each its own career; he then who would be master of his own tongue must study not only its vocabulary and grammar, but for enlightenment on many obscure points must study its related dialects. How the comparative study of language is to be carried on linguistic students are well agreed. Since language is made up of words, each word being the sign of a thought, the science of linguistics is largely the study of words—in other words, it is the tracing word genealogies by means of their etymology. By stripping words of the accretions they have received in the process of time they may be resolved into roots, and by the comparison of these roots the philologist obtains proof of relationship and classifies languages into linguistic families.

It may be well at this point to define clearly what linguists mean by a linguistic family. A linguistic family is a group of languages which have sprung from a common parent language. The first requisite of a linguistic family, therefore, is that the languages composing it shall be related genetically; the second, that they shall not be related to the languages of any other family. Each family thus consists of a group of languages wholly disconnected from all other families.

Voltaire said that to the etymologist vowels are of little consequence and the consonants of none at all, and for much that passes for etymologizing there is as much truth as wit in the saying. But there are etymologists and etymologists; moreover, in most related languages there is a large body of words, whose resemblances are so obvious and the manner and extent of the changes they have undergone so clear that he who runs may read. The chief danger to the student in dealing with such material is to mistake apparent for real resemblances, and to be led to present false word analogies as evidences of true genetic relationship. Much, then, of the work of the student is easy; but as his labors deal with linguistic changes more

and more remote in point of time the greater is the difficulty, and he who undertakes the task of comparing with each other all of the languages into which the larger linguistic families are split and to trace back the origin of their vocabularies to a common parent must indeed arm himself with all the resources of ripe scholarship, critical ability, and caution if he would successfully avoid the pitfalls which beset his steps at every turn.

That linguistic science is competent to deal with problems of great magnitude and intricacy, and that there are students who are capable of applying its varied resources, best appears in the grand achievements which concern the group of languages known as the Aryan or Indo-European family, in which our own English tongue takes a prominent if not the first place. It is almost wholly as the result of linguistic studies that the component members of the large and important Aryan family are now recognized and the history of its earlier members reconstructed to a remarkable degree. The family contains eight groups of distinct languages. Among many others the family includes as offspring from one source Sanskrit, Hindu, Romany or Gipsy, Persian, Armenian, Welsh, Cornish, Irish, Scotch, Latin, Italian, French, Spanish, Portuguese, Albanian, Greek, Bulgarian, Russian, Servian, Polish, German, English, Dutch, Swedish, Danish, Norwegian, and many others. Though one of the largest and, by reason of its history and the prominent part it has played in the civilization of the world, the most important, the Aryan family is only one of many linguistic families, each one of which is made up in the same way of a greater or less number of related languages. Such are the Bushman and Hottentot, of Africa; the Semitic, of Asia and Africa; the Chinese, Australian, and many others. The related languages which make up linguistic families vary indefinitely in the amount of likeness they bear to each other. They are often so much unlike that those who speak them cannot understand each other, as, for instance, English, German, and French. Though these languages are mutually unintelligible, yet they contain many words of nearly identical form, while other members of the Aryan family have in process of time become so unlike affiliated tongues that it requires the most critical study to detect their relationship. As languages are the principal divisions of a linguistic family, so dialects are the subordinate divisions of a language. Family, languages, and dialects are to linguistic science what family, genera, and species are to biology.

There is an important question which may be considered at this point. To what extent is linguistic relationship to be interpreted as blood relationship; in other words, how far does linguistic classification answer for race classification. In cosmopolitan America, where nearly all speak English and yet a very large proportion are of foreign parentage, it is obvious that a pure linguistic classification of individuals would largely misinterpret the facts of parentage and race. Nevertheless, taken in connection with readily ascertained facts, it will not mislead even in such an extreme case, and usually a language classification of a tribe or people actually does express race relationship.

To return to the Aryan family: Not only are we able by means of language to class together as related members of one great family the above-mentioned languages, which apparently are so diverse in the sound and form of their words, but by means of word analysis we can reconstruct the past history of the peoples who spoke them and can get a glimpse even of the mode of life, customs, arts, and religious beliefs of our remote Aryan ancestry. The process by which this is done is sufficiently simple, although, like many other simple processes, its application is not so easy. When we find in the greater number of the languages of a linguistic family the same fully formed word with the same meaning we are justified in believing that it existed before the separation of the family, and that the thing it signifies was already known to the parent body. Applying the rule to the case of the Aryan family we learn that contrary to earlier theories our forefathers came from a cold region, since eastern and western Aryan tongues contain names for the birch and pine, and these are the only two tree names common to both branches. The same process continued shows us that the family relations were defined much as they are with us to-day and that marriages were monogamous. The old Aryans held the land in common and redistributed it from time to time among the members of the clan. The houses were built of wood and were entered by means of a door. The communities were settled in villages with a recognized chief or head, and the villages were connected by roads over which traveled peddlers carrying their wares for sale. All were free men. They worshiped natural objects and natural phenomena, more particularly the sun. They believed in the evil spirits of night and darkness. They were a pastoral people, and cattle and sheep formed their chief wealth. They also had goats, pigs, dogs, geese, and bees. They had domesticated the

horse though they did not ride, but employed him like the ox for drawing carts. They still used stone implements, though gold and silver and bronze were known. Charms were chiefly relied upon to cure disease. Future events were divined from the flight of birds. These are a few of the facts among many which linguistic science has revealed to us pertaining to the life and achievements of our Aryan ancestry before the historic period. Surely no contemptible record this for a new science.

You will not fail to notice that there are a number of points in common between the condition of our Aryan ancestors and the Indian, though the former as a whole were much further advanced.

We have glanced in the briefest possible manner at the methods pursued by linguistic students and have noted a few of the results achieved by them in the study and classification of the highest developed languages. The study of such languages affords criteria of great value, but, were the linguistic student to confine his attention to these alone, his view of the nature and processes of linguistic development would necessarily be imperfect and one-sided. Just as in biology the study of the lower organisms throws a flood of light upon the structure of higher forms, so in linguistics must the lesser developed languages be appealed to for the settlement of many linguistic problems displayed in highly developed ones. Let us now turn our attention to the Indian languages of this country and see what progress has been made in the attempt to classify them.

It may be premised that no part of the known world affords a better opportunity for the study of the nature of language and its processes of growth than America. The Indian languages are by no means the most primitive at present spoken by man, and it may surprise some of my hearers to be told that in respect of some of their characteristics they compare favorably with Greek and other classic tongues, though the classic languages as a whole belong to a much higher stage of development. Instead of being mere jargons of words, disconnected with each other and capable of expressing only the simplest ideas, as I find many intelligent people believe, they are in some directions singularly highly developed, and not only are they capable of serving as the vehicle of every thought possible to their possessors, but their vocabularies are extensive, possess many synonyms, and furnish the means of discriminating the nicest shades of meaning.

There is not a principle or process in the most highly developed languages of which the germs at least are not discernible in Indian languages. The differences are not those of kind but of degree of culture.

Moreover inherent in them is the power of unlimited growth and expansion, and just as our own language grows, keeping step with advances in science and art, so Indian languages are capable of a development equal to the most exacting demands of civilization.

While thus in many respects highly developed, Indian languages are not to be compared as vehicles of thought with such languages as our own English, for instance. As a body they are still in that stage of development in which the various processes of language-making may be studied with comparative ease. Just as the various natural processes by which mountains are leveled and the earth's surface carved out and remodelled are more apparent and more readily studied by the geologist in the still primitive West, so Indian languages offer to the scrutiny of the linguistic student a similar unfinished condition highly favorable for analysis and study.

For the past fifteen years Major Powell and his assistants of the Bureau of Ethnology, with the aid of many collaborators in various parts of the country, have been accumulating vocabularies by means of which to classify Indian languages. The present provisional results of the study of the large amount of material accumulated appear before you on the Linguistic Map, which is colored to show the areas occupied by the several linguistic families. Of these there appear no fewer than 58.

What interpretation are we to place upon the astonishing fact that in the territory north of Mexico there were at the time of the discovery 58 distinct Indian linguistic families, containing some 300 or more languages and dialects?

So far as language is a competent witness she has exhausted all the evidence thus far accumulated when she has grouped the Indians in 58 families. Back of this point she may not now go except as a theorist and in pure speculation. So far as she is entitled to speak authoritatively, these 58 families are separate entities, which never had any connection with each other. But she recognizes her own limitations too well to dare to state positively that this is the interpretation that must be placed upon the results she has attained. When facts from which to draw deductions fail, men may and do resort to theories. Let us glance at the two broad hypotheses which

have been based upon the development theory of language. The first is in effect that all the present languages of the earth are not so unlike that they may not have been developed from a single original parent language. By this view the original language is supposed to have changed and developed into all the various forms of speech that are now spoken or that have ever been spoken. According to this view the families of languages as at present classified have no other significance than as groups of related tongues, the once existing connection of which with other tongues cannot now be proved, because through the process of change the connecting links have been lost.

The second hypothesis assumes that there must have been at least as many original languages as there are now existing families; it assumes, in other words, that the families of speech are fundamentally distinct and therefore cannot have had a common origin. The first theory postulates that from original unity of language has come infinite diversity; the second that the tendency has ever been from original diversity towards unity.

Widely different as are these two theories of the origin of linguistic families, they agree in one essential particular. They both remove the origin so far back in time as to make it practically impossible to *prove* the truth or falsity of either theory.

Both of these hypotheses have able advocates; but for a variety of reasons, which time will not permit me to give, the second is deemed the more plausible. At all events, it best explains many difficulties.

There is abundance of archæologic evidence showing that man has resided on this continent for a very long period, and the character of the remains prove that the farther back in time we go the ruder being he was. Linguistic testimony is to the same effect, and there is no *a priori* reason why man may not have lived upon this continent ages before he learned to talk, no reason for that matter, why America may not have peopled the earth, if the earth was peopled from a single center, or why, if there have been several centers of origin for mankind, the Indians, as they themselves believe, may not have originated here where they were found.

It is the fashion, I hardly know why, unless it be the religious bias, for those who hold that language has had but one origin to assume that America is the younger continent, so far as her people are concerned, and to infer that it was peopled from Asia. If

America was peopled from Asia in modern times there should be some evidence of the fact in American languages. But there is no evidence of the sort. None of the American families of language are in any way related to the Asiatic tongues. Bering Strait furnishes indeed a perfectly practicable canoe route from Asia to America, but it appears to have been generally overlooked that the Strait furnishes an equally accessible route from America to Asia. The latter is demonstrated by the fact that the Eskimo of Alaska have in recent times sent an Eskimo-speaking colony across Bering Strait to Siberia. In other words, so far as direct testimony goes, Asia is indebted to America for a small segment of its people, but America owes no similar debt to Asia. With reference to the origin of our Indian tribes, then, linguistic science is in position to state this much, that if our Indians came to America, either from Asia or from any other foreign shore, it was at a period so remote as to permit such profound changes in the structure of the language brought here by the immigrants that no traces of genetic connection are now discernible.

If we reject the one origin theory of language and assume that each linguistic family originated independently, there is obviously not the slightest use of turning to Asia or Europe for anything like a recent importation of the Indian; for have we not fifty-eight distinct origins to account for? Obviously the fifty-eight families are as likely to have originated here as anywhere else; for remember that every country has linguistic families of its own to account for. Is there, then, any possible theory which will meet the case? There is certainly one that is possible, if not probable. It is the theory that, whether born from the soil or an immigrant from other lands, our Indians spread over the entire continent before they acquired organized language, and that from not one but from fifty-eight centers sprung up the germs of speech which have resulted in the different families of language. This theory accords with the idea that there may have been but one origin of man, and that in any event all the Indians from the Arctic to Patagonia are of one race. It does not forbid the supposition that the Indian was an immigrant from other shores, though it permits the thought that the American Indian may have originated on American soil.

Though this theory seems more probable than the other, which assumes that the languages of our Indians were brought here from foreign shores, it must be frankly admitted that linguistic science is

not now and possibly never will be competent to decide between them. If she is unable to decide fully as to the origin of the Indian's language, how can she be expected to solve the infinitely more complex problem which concerns the ultimate origin of the peoples who spoke them? She certainly has no solution for this problem now. When she considers the number of linguistic families and the vast length of time it must have taken to develop their languages and dialects she finds herself confronted by a problem beyond her present powers. And yet the case is not hopeless. Linguistic science is still in its infancy, and its future may contain possibilities far exceeding the dream of the most sanguine. As science has revolutionized the world's processes and has made the impossibilities of a hundred years ago the common-places of to-day, so like wonders may be achieved in the domain of thought, and the science of language, with the assistance of her sister sciences, may yet answer the unanswerable questions of the present.

When interrogated as to the origin of the Indian, all that she can now say is that whether the Indian originated on this continent, where he was found, or elsewhere, it was in bygone ages—ages so far removed from our own time that the interval is to be reckoned, not by the years of chronology, but by the epochs of geologic time; with such problems she affirms that at present she cannot deal.

I have presented the subject to you to-day, not to answer it, but to aid you in comprehending the tremendous difficulties that enshroud the problem. Much time and ingenuity has been expended in the past in attempting to force an answer to a question which cannot even yet be answered. The question, however, that really concerns the ethnologist of to-day is not *who* are the American Indians, but *what* are they and what have they accomplished in working out the problems of life, which, ever since his birth, man has grappled with.

In reading the history of mankind we are too apt to be blinded by the achievements of our own Aryan race. As the old Greeks classed as barbarians all who did not speak their own tongue, so we are prone to think that most of the good that has come to humanity has come through and by means of our race. In truth, there are valuable lessons to be learned from races less high in civilization than our own. Though many and diverse are the roads that lead man to the higher life, they all pursue about the same

course, and time only is required to unite them into one broad stream of progress.

Many are the lessons taught by anthropology, but the grandest of them all is the lesson of the unity of mankind, the unity of a common nature and a common destiny, if not of a common origin.

W 1 0 1 5

THE LIBRARY OF CONGRESS

LIBRARY OF CONGRESS
0 029 813 341 6